

1. Record Nr.	UNINA9910841497503321
Autore	Chadwick Derek
Titolo	Nuclear organization in development and disease [[electronic resource] /] / [editors, Derek Chadwick, Jamie Goode]
Pubbl/distr/stampa	Hoboken, NJ, : Wiley, 2005
ISBN	1-280-27638-X 9786610276387 0-470-09376-5 0-470-09374-9
Descrizione fisica	1 online resource (302 p.)
Collana	Novartis Foundation symposium ; ; 264
Altri autori (Persone)	GoodeJamie
Disciplina	571.936 571.9366
Soggetti	Cell nuclei Cell nuclei - Abnormalities Developmental cytology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	NUCLEAR ORGANIZATION IN DEVELOPMENT AND DISEASE; Contents; Participants; Chair's introduction; Nuclear lamins: building blocks of nuclear structure and function; Discussion; Aspects of nuclear envelope dynamics in mitotic cells; Discussion; Components of the nuclear envelope and their role in human disease; Discussion; Nuclear membrane protein emerin: roles in gene regulation, actin dynamics and human disease; Discussion; Identification of novel integral membrane proteins of the nuclear envelope with potential disease links using subtractive proteomics; Discussion; Genetics of laminopathies DiscussionMuscular dystrophies related to the cytoskeleton/nuclear envelope; Discussion; Skeletal and cardiac muscle defects in a murine model of Emery-Dreifuss muscular dystrophy; Discussion; Multiple pathways tether telomeres and silent chromatin at the nuclear periphery: functional implications for Sir-mediated repression; Discussion; A-type lamin-linked lipodystrophies; Discussion; Cytoskeletal defects in amyotrophic lateral sclerosis (motor neuron disease); Discussion; LMNA mutations in progeroid syndromes;

Discussion

A genetic approach to study the role of nuclear envelope components in nuclear positioning; Discussion; General discussion I; A lamin-dependent pathway that regulates nuclear organization, cell-cycle progression and germ-cell development; Discussion; Mutations in the mouse Lmna gene causing progeria, muscular dystrophy and cardiomyopathy; Discussion; The nuclear membrane and mechanotransduction: impaired nuclear mechanics and mechanotransduction in lamin A/C-deficient cells; Discussion; Chair's summing-up; Index of contributors; Subject index

Sommario/riassunto

This book draws together contributions from cell and developmental biologists, structural biologists, geneticists and clinical scientists aimed at a better understanding of the cellular and molecular basis of these diseases. Topics include: How nuclear structure and location within a nucleus affect gene expression; Chromatin organization and cell differentiation; The nature of the interactions between the nuclear envelope and the cytoskeleton; The extent to which the cytoskeleton mediates communication between the cell membrane and nucleus in regulating gene expression and whether
